



INSTRUCTION TO SERVICE

ITS: 6420	
SECTION:	600 Fire Suppression System
WRITTEN BY:	Scott Geier
SUBJECT:	Amerex Display Module and Firmware Validation

ITS6420

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Issue: Gas sensor wake up signal was missed during firmware cross reference testing. This causes the gas sensors inoperative when power is restored following a power failure.

Solution: Replace VFD display using part numbers 16389 or 24918. Validate all VFD has the latest firmware Rev. 4.70.

NOTE: This instruction is written base off Amerex instructions name "Safety Net Firmware Upgrade and System Test Verification".

Procedure:

1. Connect Amerex Simulator Module P/N 21447 to the Actuator Lead. Verify that the currently installed Amerex Display shows the Fire System is in a System OK status.
2. Press the push to test button on the Amerex display. Verify Firmware level. Replace if the Firmware is 4.60 or 4.61. Other Firmware levels do not require replacement.
3. Replace VFD Display using Amerex P/N 16389 or 24918 with Rev 4.70 display controller (NF PN: 284133).
4. Upload Safety Net configuration specific to the bus contract.
5. Perform AMT (Automated Maintenance Test) to insure that all devices are recognized.

Note: It is not necessary to retest heat detectors previously tested by New Flyer. That function is independent of the control panel test. The AMT function will determine if circuits are connected to the system.

6. Disconnect the EOL from the heat detection network. Verify that the system registers a fault condition on the Display. Reconnect. Verify the fault condition clears.
7. Verify the gas sensors circuits are operating properly. Disconnect vehicle battery power to the Amerex panel. Wait for the system to go into a fault condition and the panel annunciates the condition. Reconnect power. Disconnect gas sensor lead #1 from Amerex P/N 16390 Driver Panel. Verify a sensor fault condition is registered on P/N16389 VFD Display. Reconnect the gas sensor lead and verify that P/N 16389 VFD Display has returned to normal. Repeat these steps for EACH remaining gas sensor lead.
8. Verify the VFD Display shows the Fire Suppression System is in an OK status. (If it does not show an OK status there is a problem that needs to be corrected before doing anything else! Failure to correct a problem at this point can cause a system discharge if the linear actuator is connected to the system.) Disconnect P/N 21447 Simulator Module. If the Fire Suppression system is intended to be live at this point connect P/N 22579 Linear Actuator to the Actuator lead.



LABOUR ESTIMATE				
	Operation	Men	Hours	Labour Time M X HR
1	Replace Display Controller and upload the firmware	1	.5	.5

Total HRS: .5 HRS.

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	284133	PANEL-DISPLAY F&G AVSN	1	EA	Replace as needed.